

# TURFGRASS SEED AND FERTILIZER BIDDING SPECIFICATIONS

By WILLIAM E. KNOOP

EXTENSION TURF SPECIALIST, UNIVERSITY OF NEW HAMPSHIRE

**S**IZEABLE seed and fertilizer purchases often require the buyer to solicit bids.

Offering a proposed purchase of seed and fertilizer for competitive bids has several advantages. Because you are asking companies to compete for your business, they will quote the lowest price within a realistic profit margin. They must give you no more than stated in your bid specifications. If the specifications are not clearly presented, you will receive undesirable materials. Reasonable and correct specifications will assure quality materials at the best possible price.

## SPECIFICATIONS FOR THE PURCHASE OF TURFGRASS SEED

Each state has laws to govern the production and sale of turfgrass seed. In general, each state requires the seed producer to list certain information on the seed container. It may be printed on the box or on a tag attached to the container. The information usually includes the following:

1. The name of the seed **producer** or **seller**.
2. The seed **lot number**.
3. The seed variety (sometimes including the scientific name)
4. The percent purity of each variety and species present (if a mixture).
5. The percent live seed of each variety as expressed by **germination**.
6. The percentage of any **weed** or **crop seed** present.
7. The percentage of any non-seed material present expressed as **inert matter**.
8. A list by variety of any noxious weeds present and their **rate of occurrence** (usually number of seeds per pound).
9. The **date** when last the seed was tested for germination.

Sample seed tag data are shown in Table 2. Your bidding specifications should include requirements for the same information. It is your prerogative to control the quality

of your proposed purchase by specifying the **purity** and **germination** percentages on your bidding proposal.

These should be considered minimum quality standards for turfgrass seed. In addition to purity and germination standards, you should specify that **there cannot be any noxious weeds present** and that the seed must have been **tested for germination within the past 9 months**. Usually the area to be seeded will require a mixture of turfgrasses rather than a single variety. When asking for bids on a seed mixture, there are several problems. The first is whether to specify the mixture in percent by weight or percent by volume. Another problem is how to be sure the seed obtained is indeed the mixture ordered. The best answer to both problems is to bid each grass variety separately and mix them yourself. A sample bidding specification follows. Note that the sample specification calls for 260 lbs. of Kentucky Bluegrass, 100 lbs. of Creeping Red Fescue and 40 lbs. of annual ryegrass. That will combine to form a 65% Kentucky Bluegrass, 25% Creeping Red Fescue and 10% annual ryegrass mixture.

## SEED NOT MEETING SPECIFICATIONS

At one time or another seed meeting your purity or germination standards may not be available. In that event an adjustment may be made in the amount of seed purchased so the bid is not rejected.

As an example, in the sample bidding specifications, we ask for 260 lbs. of Kentucky Bluegrass of at least 85% purity and 80% germination. Purity x germination equals the percentage of pure live seed present. 85% purity x 80% germination = 68% pure live seed. Assume that Kentucky Bluegrass seed of a purity of 85% was not available and that the purity of the available seed was only 80%. This means that 80% purity x 80% ger-

mination = 64% pure live seed as compared to the 68% requested in the specifications. Rather than cancel the bids because no supplier could meet the specifications, the supplier could be allowed to increase the amount of seed to make up for the lower purity. The following shows how such an adjustment would be computed. The equation is:

$$C = \frac{A \times D}{B}$$

A = % pure live seed requested (68%),

B = % pure live seed supplied (64%),

C = amount of lower purity seed to be supplied,

D = amount of seed requested (200 lbs.).

Using the sample figures in parentheses,

$$C = \frac{68 \times 260}{64} = 276 \text{ lbs.}$$

The supplier could furnish 272 lbs. of his Kentucky Bluegrass and you would still have the same number of pure live seeds requested in the bid specification.

A sample statement for possible inclusion in bidding proposals might be as follows:

In the event that only seed lower in purity and germination than the above standards is available, the low bidder may furnish an increased amount of seed, at no additional cost, provided that he match on the basis of pure live seed the quality of the seed required in the bidding specifications. Seed 10% lower in either purity or germination will not be accepted.

## SPECIFICATIONS FOR THE PURCHASE OF TURF FERTILIZER

Each state has a law governing the manufacture and sale of fertilizers. The manufacturer must place a statement guaranteeing the weight and analysis of the fertilizer

**Table 1. Suggested Purity and Germination Percentages For the Common Turfgrass Varieties**

Variety	Scientific Name	Purity	Germination
Kentucky bluegrass	<i>Poa pratensis</i>	85	80
Creeping red fescue	<i>Festuca rubra</i>	97	85
Tall fescue	<i>Festuca arundinacea</i>	98	85
Annual or Italian Ryegrass	<i>Lolium multiflorum</i>	97	85
Perennial Ryegrass	<i>Lolium perenne</i>	97	85
Colonial bentgrass	<i>Agrostis tenuis</i>	97	85
Creeping bentgrass	<i>Agrostis palustris</i>	98	85
Red Top	<i>Agrostis alba</i>	90	90

on, or attach it to, the bag or container. If the fertilizer is delivered in bulk, a written statement containing the same information must be supplied to the purchaser at the time of delivery.

The statement of analysis guarantee must contain the following

**Table 2. Sample Seed Tag Data**

JONES SEED COMPANY KENTUCKY BLUEGRASS			
Lot 21-557-B	Germ.	80.00%	
Purity 95.19%	Crop	3.06%	
Inert 1.73%	Weed	0.02%	
387 annl. bluegrass per 1 b.			
TESTED 9-70			

information expressed as percent by weight:

- The total amount of nitrogen (N) in the fertilizer.
  - The amount of water insoluble nitrogen (W.I.N.) present, if claimed (by the formulator).
  - The amount of phosphorus (P) present, expressed as  $P_2O_5$ .
  - The amount of potassium (K) present expressed as  $K_2O$ .
- A sample label for a 12-2-8 fer-

tilizer might read:

**Jones Fertilizer Company**

Total Nitrogen	12%
W.I.N.	6%
Phosphorus ( $P_2O_5$ )	2%
Potassium ( $K_2O$ )	8%
Net Weight 50 lbs.	

Note that in the above example half (6%) of the total (12%) nitrogen present is in a water insoluble form. This means that half the nitrogen in the fertilizer is a slow release type. This characteristic makes it a good turf fertilizer.

Your bidding specifications should specify the following:

- The total amount of nitrogen (N).
- The amount of nitrogen in the water insoluble form (W.I.N.)
- The amount of phosphorus ( $P_2O_5$ ).
- The amount of potassium ( $K_2O$ ).
- If you want bag or bulk delivery. (If bag—the size of the bags)
- A statement to the effect that the fertilizer should meet the State standards.
- A statement concerning your bidding policy.

**Table 3. Bidding Specifications for Turfgrass Seed**

A. Amount (lbs.)	Variety	Scientific Name	Percent by weight Purity	Percent by weight Germination
1. 260	Kentucky Bluegrass	<i>Poa pratensis</i>	85	80
2. 100	Creeping Red Fescue	<i>Festuca rubra</i>	97	85
3. 40	Annual Ryegrass	<i>Lolium multiflorum</i>	98	85

B. Seed must have been tested by the State Analytical Services Lab within the past nine (9) months.

C. Seed shall not contain any noxious weed seed as defined by State seed laws.

D. Add your bidding policy statement plus any penalty clause.

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